

Midwest Electric Vehicle Opportunities: Learning, eVents, Experience

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Project ID
TI083

This presentation does not contain any proprietary, confidential, or otherwise restricted information

Overview

Timeline

- Start: October 1, 2016
- End: September 30, 2019
- 50% complete (as of March 2018)

Budget

- Total project funding \$1,960,156
 - DOE share: \$949,977
 - Contractor share: \$1,010,179
- Funding received in FY17
 - \$182,233
- Funding for FY18
 - \$162,762.39

Barriers

- Availability of electric vehicles in Midwestern states.
- Charging infrastructure; perceptions and realities of lack of infrastructure in Midwest.
- Consumer and fleet reluctance to purchase new technologies

Partners & 50+ stakeholders

- American Lung Association/Twin Cities Clean Cities Coalition
- Chicago Area Clean Cities
- Clean Fuels Ohio
- Greater Lansing Area Clean Cities
- North Dakota Clean Cities
- South Shore Clean Cities
- Twin Cities Clean Cities Coalition
- Wisconsin Clean Cities
- Argonne National Laboratory
- Make Ideas Reality
- PlugInConnect

Project Objectives

Objectives

- Promote & demonstrate electric vehicle (EV) use by establishing local showcases
- Provide a hands-on experience to test drive a variety of locally available EVs
- Assist consumers & fleets to determine the best vehicle & charging options
- Educate dealerships on benefits of EVs

Support VTO Goals

- National Security
- Economic Growth
- Affordability for Business & Consumers
- Reliability & Resiliency

Impact

- Increase the number of drivers exposed to electric vehicles
- Host electric vehicle test drives that are brand neutral in local settings
- Developed Tools & Resources
- Data Collection on EV perceptions

Project Approach

Outreach & Test Drives

- Large (Macro) events
- Small (micro) events
- Workplace Charging Events
- Survey & Data Collection



Communications

- Create & implement key messaging and templates
- Create & execute communications plan
- Develop & maintain website, social media, blog & more

Education

- Dealership Training
- EV Owner Forums
- Utilities & EV connection
- Best Practices & Concept Papers
- EVolution Consumer Tool

Milestones

Budget Period 1	Milestone	Type	Description
	Macro and Micro Events	Technical	Hold approximately 10% of events
	EV Dealer Training, Workplace Charging Challenge Showcase Events	Technical	Develop initial EV Dealership Training Event materials and Workplace Charging Challenge Showcase Event materials
	Extended Test Drive and Electric Vehicle Forum Events	Technical	Extended Test Drive membership established and EV Forum materials development complete
	Public Relations and Communications	Technical	Key message developed; Establish project specific website
	Project Initiation	Go/No Go	All contracts secured

Budget Period 1	Milestone	Type	Description
	Macro and Micro Events	Technical	Hold approximately 50% of events
	EV Dealership Training, Workplace Charging Challenge Showcase Events	Technical	Complete EV Dealership Training; Hold 50% of Workplace Charging Challenge Showcase events
	Extended Test Drive & EV Forum Events	Technical	Hold approximately 50% of events/forums
	Public Relations and Communications	Technical	Complete approximately 50% event communications
	Project Events	Go/No Go	Approximately 50% of all events completed

Milestones (Cont.)

Budget Period 3	Milestone	Type	Description
	Macro and Micro Events	Technical	Hold 100% of events (78 total)
	EV Dealership Training, Workplace Charging Challenge Showcase Events	Technical	Hold 100% of events (68 total)
	Extended Test Drive and Electric Vehicle Forum Events	Technical	Hold 100% of events/forums (73 total)
	Public Relations and Communications	Technical	Marketing evaluations complete

Project Completion Date: September 30, 2019

www.MidwestEVOLVE.org | [#MidwestEVOLVE](https://twitter.com/MidwestEVOLVE)



Project Accomplishments and Progress

Public Relations and Communications

- Website: MidwestEVOLVE.org
- Social Media
- Strategic Communications Plan
- Key Messages
- Resources: Case Studies
- Tools: EVolution
- Data: 2,400 surveys completed



Consumer Vehicle Purchase Guidance Tool:
EVolution-informing your choice for a smart purchase



<https://evolution.es.anl.gov/>



Project Accomplishments and Progress (cont.)

Macro and Micro Events

- 2017 Ohio Earthfest
- 2017 Taste of Chicago
- 2017 Milwaukee Summerfest
- 2017 Drive Electric Week
- 2018 Twin Cities Auto Show
- 2018 Chicago Auto Show

Work Place Charging Event

- Allianz Life Insurance: MN
- BookFactory, OH
- Target Corporation, MN
- Uponor, MN
- Alliant Energy, WI
- Lansing Community College, MI



Plug-In Electric Vehicle Event

📅 March 1, 2018 - March 1, 2018
🕒 6 - 8 p.m.
📍 The Electric Room at the Milwaukee Auto Show
Milwaukee, Wisconsin

Join us for a plug-in electric vehicle event! EV owners & enthusiasts are invited to join us Thursday, March 1 from 6 p.m. to 8 p.m. in The Electric Room at the Milwaukee Auto Show. Jukka Kukkonen of the Minnesota PEV Owners's Circle will serve as tour facilitator & will lead attendees on tours of the PEVs on display in The Electric Room and throughout the Greater Milwaukee Auto Show. Admission is free but pre-registration is required.

Electric Vehicle Owners Meeting at the Chicago Auto Show

📅 February 13, 2018 - February 13, 2018
🕒 6 p.m. to 9 p.m.
📍 McCormick Place
Chicago, Illinois

The Chicago Area Clean Cities Coalition is celebrating our first electric vehicle ride- and drive at the Chicago Auto Show by organizing an electric-vehicle owners meeting. Meet other EV owners and see some cool cars while you are at the show. To register, go to <http://chicagoareaclccities.org/event/plug-electric-vehicle-owner-meeting>.



Project Accomplishments and Progress (cont.)

Dealer Training

- Case studies developed
- Webinars developed & promoted

EV Owners Forum

- Forums are being developed and expanded in OH, WI, IL, IN, MI
- Case study developed to build EV owners community in any state



Project Accomplishments and Progress (cont.)

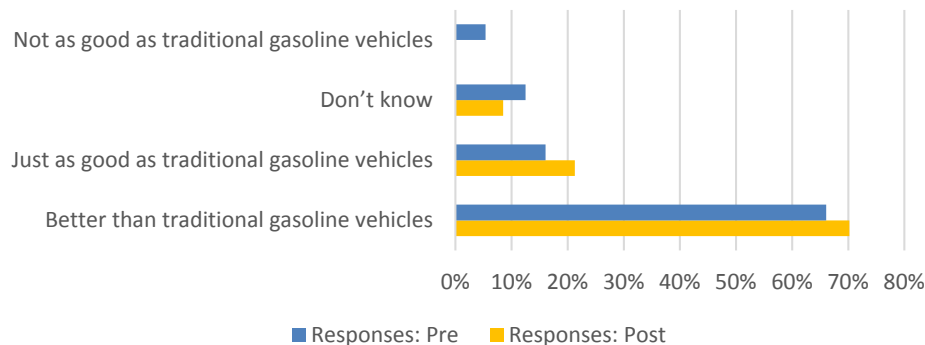
Test Drives

- 50,000 people attended events
 - (as of March 2018)
- 2,300 test drives completed

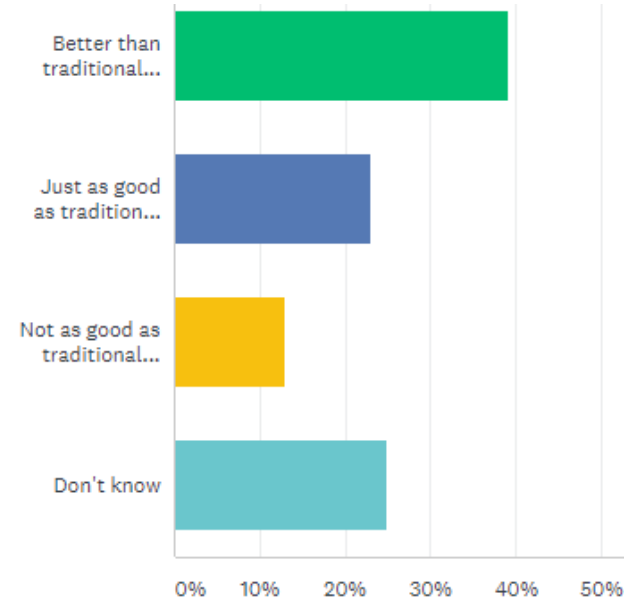
Surveys

- Pre, Post & Follow surveys completed at nearly every test drive event
- 2,400 surveys collected (as of March 2018)

Change in Opinion of PHEVs



What is your opinion of BEV?



13% of attendees have never experienced an electric vehicle before Midwest EVOLVE test drive events

Collaboration and Coordination Among Project Team

Workplace Charging Locations

- Anderson Corporation
- Aveda
- Book Factory
- Cincinnati Zoo
- City of Cincinnati
- City of Cleveland, Office of Sustainability
- Grove City
- Health Partners
- IBEW/NECA Technical Institute
- Rife Autobody
- Tennant

Utilities

- ComEd
- Great River Energy
- First Energy
- Madison Gas and Electric Company
- Xcel Energy

OEMs and Dealerships

- Nissan
- Germain Nissan
- Mike Bass Ford
- McCluskey Chevy
- Perillo BMW
- White Bear Mitsubishi
- Kline Nissan

Additional Partners

- Carbon Day
- Clipper Creek
- ChargePoint
- NRG EVgo
- Element Financial Corporation
- E-RIVE
- Great Lakes Renewable Energy Association
- Lake Michigan Clean Cities Consortium
- Minnesota Plug-in EV Owners Circle
- Drive Electric Minnesota



The list grows every quarter: Partners listed above help collaborate events in local regions.

Impact & Sustainability

- Surveys have shown an increase in saying pure EVs are “as good as” or “better than” gasoline vehicles after the event
- Workplaces are adding electric vehicle charging or starting in depth conversations about adding for fleets and employees at sites where Midwest EVOLVE hosted events
- Dealerships in the Midwest region have become more responsive since inception of project
- Nearly 100 extra events (not funded by project) have taken place to raise awareness
- Key messaging, best practice guides and concept papers have been developed and shared with partners outside of project and region

Future Projects & Sustainability

- Barriers and challenges include: Continued shortage of electric vehicles available in Midwest market; technology and effort to collect quality surveys; dealership staff turnover; and general market/cost of vehicles

Summary Slide

Relevance

Promote & demonstrate electric vehicle use by establishing local showcases that provide a hands-on experience to test drive a variety of locally available EVs to determine the best vehicle and charging options for the consumer's personal or fleet needs.



Approach

EV Showcases provide consumers, fleets and businesses in-depth education in a variety of conveniently located, brand-neutral settings. Partners provide drivers with opportunities to experience driving a variety of EVs and interacting with electric vehicle supply equipment.



Collaborations

Together six Clean Cities coalitions in Illinois, Indiana, Michigan, Minnesota, North Dakota, Ohio and Wisconsin and state and local government, utilities, private businesses, and OEMs/ dealerships collaborate to host over 219 event.

Accomplishment & Progress

- 64 events (32% of total events as of March 2018)
- 48,000 attendees have participated in events
- 36 ride & drives with more than 2,300 test drives
- MidwestEVOLVE.org has been implemented

